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Epidemiologic Notes and Reports

***Salmonella hadar* Associated with Pet Ducklings — Connecticut, Maryland, and Pennsylvania, 1991**

The association between *Salmonella* and pets, particularly birds and reptiles, is well established (1–4). In the spring of 1991, a cluster of *Salmonella* infections in Connecticut, Maryland, and Pennsylvania was linked to pet ducklings. This outbreak underscores the need for careful handling of pets, especially ducklings during the spring and Easter seasons.

On April 18, 1991, a local health department notified the Maryland Department of Health and Mental Hygiene of three cases of *Salmonella hadar* (group C2) infection linked to ducklings from one pet store. State health departments in Connecticut and Pennsylvania independently identified cases of *S. hadar* infection among persons who had recently obtained ducklings in their states. To determine the frequency of duckling-associated *S. hadar* infections, each state health department interviewed all persons with *S. hadar* infection reported during April 1–May 15. Specimens from ducklings with whom infected persons had had contact before onset of infection were cultured, and the ducklings were traced to source hatcheries. This report summarizes the results of the investigation.

The three states identified 22 cases of *S. hadar* infection. Sixteen (73%) were duckling-associated: six from Pennsylvania and five each from Maryland and Connecticut; additional information was available for 15 of the 16 cases. Ages of infected persons ranged from 3 months to 42 years (mean: 7.5 years); 13 were aged <10 years. Eleven (73%) were female. Thirteen (87%) reported symptoms, including diarrhea (100%), fever (85%), abdominal cramps (77%), nausea (54%), bloody stool (46%), and vomiting (38%); four (27%) were hospitalized. Symptomatic patients had acquired one or more pet ducklings 3–19 days (median: 8 days) before onset of *S. hadar* infection. In all homes, ducklings were initially kept inside; in at least three, they were allowed to run free. In one home, a duckling lived in the bathtub where children bathed. In another, the mother of a 3-month-old breastfed infant with *S. hadar* infection reported not washing her hands after handling ducklings.

A case-control study of children aged ≤10 years was conducted in Maryland and Connecticut. Nine children with *S. hadar* infection were compared with 19 age-

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matched children with salmonellosis caused by other serotypes and reported during March 23–May 10. Children with *S. hadar* infection were more likely to live in a household where a duckling was kept as a pet (9:9 versus 0:19; odds ratio indeterminate; $p<0.01$) but were not more likely to have had exposure to other pets or farm animals or to have had other risk factors for salmonellosis, such as consumption of inadequately cooked eggs or undercooked foods of animal origin.

S. hadar was recovered from 17 (81%) of 21 ducklings from lots supplied to the implicated pet store in Maryland and from rectal swabs or fecal specimens of eight (62%) of 13 ducklings associated with the Connecticut and Pennsylvania cases. Ducklings associated with Maryland cases had been obtained from the implicated pet store or had been won as prizes at an Easter egg hunt. Ducklings associated with cases in Connecticut and Pennsylvania were purchased at several different retailers. All ducklings were traced to two hatcheries in one Pennsylvania town. No connection was identified between the hatcheries, and no cultures were obtained from ducklings or from the environment at either hatchery. During duckling season (March–August), the two breeders distribute up to 2000 ducklings per week by mail order, 80%–90% of which are sold in the northeastern and southeastern United States. Peak shipments occur during the Easter season.

Reported by: C Svitlik, PhD, Waterbury Health Dept Laboratory; M Carter, MD, Y McCarter, PhD, JL Hadler, MD, State Epidemiologist, Connecticut State Dept of Health Svcs. D Goeller, MS, Worcester County Health Dept; C Groves, MS, D Dwyer, MD, D Tilghman, E Israel, MD, State Epidemiologist, Maryland State Dept of Health and Mental Hygiene. R Housenrecht, PhD, S Yeager, DR Tavris, MD, State Epidemiologist, Pennsylvania Dept of Health. Div of Field Epidemiology, Epidemiology Program Office; Enteric Diseases Br, Div of Bacterial and Mycotic Diseases, National Center for Infectious Diseases, CDC.

Editorial Note: Previous reports have documented the potential for ducklings (5) and chicks (6) to transmit *Salmonella* to humans. The proportion of all salmonellosis attributable to ducklings and chicks is unknown but is likely to be small because most *Salmonella* infections are foodborne. Young children are at higher risk because they are often the recipients of these pets and may be unable to follow instructions about careful hygiene. Infants, if infected, are particularly susceptible to severe salmonellosis.

S. hadar was the fifth most frequently reported *Salmonella* serotype in humans each year from 1986 through 1990. During that period, 9375 isolates (4.6% of all *Salmonella* isolates from human sources reported to CDC) were *S. hadar*. Poultry is the major reservoir of *S. hadar*. In 1990, the latest year for which data are available, 20% of *Salmonella* isolates from ducks were *S. hadar*. *S. enteritidis* and *S. typhimurium* have also frequently been isolated from ducks.

In Maryland, following the recovery of several serotypes of *Salmonella* from chicks and ducklings that were for sale during the Easter seasons of 1965–1967, legislation was enacted allowing the sale of fowl under 3 weeks of age only to commercial breeders and farmers (7). Similar legislation exists in Connecticut, Pennsylvania, and other states; however, enforcement is difficult, especially when ducklings can be purchased through out-of-state mail order and the seller may not ascertain why the fowl was purchased.

To prevent cases of *Salmonella* transmission from ducklings and chicks, owners should be aware of the risk for disease associated with contact of feces from these animals and of the need for careful handwashing after handling. Ducklings and chicks should not be kept as household pets for infants and young children. During

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investigations of *Salmonella* infections, especially during the spring and Easter seasons, health-care workers and public health personnel should consider contact with pet ducklings or chicks as a potential source and obtain cultures from these animals if they are implicated.

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Current Trends**Electrocutions in the Construction Industry
Involving Portable Metal Ladders — United States, 1984–1988**

In the United States, electrocution is the fifth leading cause of work-related death from injury (1,2) and the second leading cause of death in the construction industry (3). Ten percent of electrocution incidents in the construction industry involve ladders (4). To identify and characterize incidents in which construction workers were electrocuted while using portable ladders, CDC's National Institute for Occupational Safety and Health (NIOSH) analyzed national data for 1984–1988. This report summarizes the analysis and recommendations for prevention of electrocutions involving portable metal ladders.

Data from 1984 through 1988 were analyzed from three sources: 1) death certificates maintained in the NIOSH National Traumatic Occupational Fatality (NTOF) data base,* 2) NIOSH Fatal Accident Circumstances and Epidemiology reports, and 3) Occupational Safety and Health Administration (OSHA) investigation files. After duplicate reports were eliminated, the analysis identified 89 work-related deaths occurring in 82 incidents involving metal ladders for the 5 years.

The average age of persons electrocuted was 30.4 years. Of the 89 deaths, 81 (91%) were caused when workers working near an overhead power line moved portable metal extension ladders that contacted the line. The remaining eight (9%) deaths involved workers who touched an energized apparatus or power line while standing on metal ladders. The risk for such events was highest for workers engaged in painting and roofing activities (Table 1). Electrocutions associated with metal-ladder

*The NTOF data base contains information from death certificates provided by the 50 states and the District of Columbia that meet the following criteria: 1) death was related to external causes (*International Classification of Diseases, Ninth Revision*, codes E800–E999), 2) the decedent was aged ≥ 16 years, and 3) the injury occurred at work.

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use peaked in the summer months; during 1984–1988, 50 (56%) of the 89 deaths occurred during July, August, and September.

Reported by: Div of Safety Research, National Institute for Occupational Safety and Health, CDC.

Editorial Note: Electrocution involving portable metal ladders is a potential hazard for construction workers. At greatest risk are painters and roofers who use ladders frequently and who may not be fully aware of risks associated with power lines and electrical equipment.

This analysis has at least three limitations. First, deaths related to metal ladders may be underreported by up to 50% because the data sources used in this analysis do not include all work-related deaths (5). Second, the analysis could not completely characterize these incidents because the fatality reports did not consistently provide details about these incidents (e.g., whether electrocution hazard warning decals were affixed to the ladders). Third, trends could not be determined because of the low number of deaths within this time frame.

Investigations by the U.S. Consumer Product Safety Commission indicate that contact with power lines most often occurs with the top 3 feet of the ladder (6). The use of extension ladders made of or coated with nonconducting materials is one approach to preventing such incidents; the use of nonconducting materials has been a successful approach with citizen's band radio antennas.

OSHA regulations require the use of nonconductive ladders where the employee or the ladder could contact exposed electrical conductors (i.e., a conductor strung from a utility pole) (7) and require that all metal ladders be prominently marked with a warning label (8). In 1989, NIOSH recommended that employers and workers use nonconductive ladders in locations where contact with overhead electrical power lines could occur (9).

During 1982, ladder manufacturers initiated a voluntary labeling standard issued by the American National Standards Institute that called for labeling portable metal ladders with the warning "Danger! Metal ladders conduct electricity. Do not let ladders of any material come in contact with live electrical wires" (10). Because of this voluntary labeling standard, extension ladders are now labeled with an electrocution hazard warning.

Despite these warnings, the regulations concerning ladder use, and the provision of safety training for workers, electrocutions caused by ladders contacting overhead power lines continue to occur. However, the routine use of nonconducting extension ladders in high-risk trades (e.g., painting and roofing) would reduce the risk for death

TABLE 1. Death rates* for electrocution involving portable metal ladders, by construction industry category — United States, 1984–1988

Category, by Standard Industrial Classification codes	No. deaths	No. employed†	Rate
Painting contractors (172)	36	163,100	4.41
Roofing contractors (176)	19	207,000	1.84
Electrical contractors (173)	8	522,200	0.31
All other construction	26	4,011,700	0.13
Total	89	4,904,000	0.36

*Per 100,000 workers, annually.

†During 1986.

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and injury from electrocution. Other preventive measures include 1) elimination of metal-ladder use within 10 feet of overhead power lines, 2) insulation or deenergization of power lines in work areas, and 3) use of steering lines attached to the upper ends of ladders to stabilize and prevent them from tipping backward into power lines.

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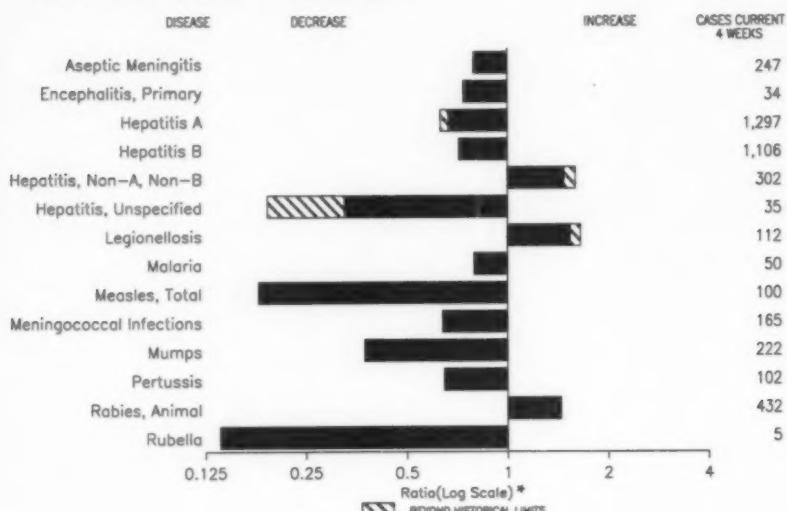
Trends in Alcohol-Related Traffic Fatalities, by Sex — United States, 1982–1990

For 1990, the number of traffic fatalities (44,529) reported in the United States was the lowest number reported since 1985 (1). However, limited studies appear to indicate that the proportion of female drivers involved in fatal crashes and the proportion arrested for driving while intoxicated may be increasing (2–4). This report summarizes data from the National Highway Traffic Safety Administration's (NHTSA) Fatal Accident Reporting System on trends in alcohol-related traffic fatalities (ARTFs) among females and males in the United States from 1982 through 1990. In addition, a quarterly table (page 199 of this issue) presents data on alcohol involvement in fatal motor-vehicle crashes in the United States for January–March 1991.

A fatal traffic crash is considered alcohol-related by NHTSA if either a driver or nonoccupant (e.g., a pedestrian) had a blood alcohol concentration (BAC) ≥ 0.01 g/dL in a traffic crash reported to police. NHTSA defines a BAC ≥ 0.01 g/dL but < 0.10 g/dL as indicating a low level of alcohol and a BAC ≥ 0.10 g/dL (the legal level of intoxication in most states) as indicating intoxication. Because BAC levels are not available for all persons involved in fatal crashes, NHTSA estimates the number of ARTFs based on a discriminant analysis of information from all cases for which driver or nonoccupant BAC data are available (5). In this report, "alcohol-involved" refers to drivers with a BAC ≥ 0.01 g/dL. Data on drivers refer only to drivers involved in fatal crashes. Data on sex are reported only for persons for whom sex is known (>98%).

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FIGURE I. Notifiable disease reports, comparison of 4-week totals ending March 14, 1992, with historical data — United States



*Ratio of current 4-week total to the mean of 15 4-week totals (from previous, comparable, and subsequent 4-week periods for the past 5 years). The point where the hatched area begins is based on the mean and two standard deviations of these 4-week totals.

TABLE I. Summary — cases of specified notifiable diseases, United States, cumulative, week ending March 14, 1992 (11th Week)

	Cum. 1992		Cum. 1992
AIDS	10,177	Measles: imported	24
Anthrax	-	Measles: indigenous	193
Botulism: Foodborne	7	Plague	-
Infant	12	Poliomyelitis, Paralytic*	-
Other	-	Psittacosis	9
Brucellosis	3	Rabies, human	-
Cholera	13	Syphilis, primary & secondary	7,280
Congenital rubella syndrome	2	Syphilis, congenital, age < 1 year	-
Diphtheria	1	Tetanus	4
Encephalitis, post-infectious	17	Toxic shock syndrome	58
Gonorrhea	99,100	Trichinosis	2
<i>Haemophilus influenzae</i> (invasive disease)	354	Tuberculosis	3,325
Hansen Disease	21	Tularemia	15
Leptospirosis	7	Typhoid fever	53
Lyme Disease	618	Typhus fever, tickborne (RMSF)	22

*Nine suspected cases of poliomyelitis have been reported in 1991; 4 of the 8 suspected cases in 1990 were confirmed, and all were vaccine associated.

TABLE II. Cases of selected notifiable diseases, United States, weeks ending March 14, 1992, and March 16, 1991 (11th Week)

Reporting Area	AIDS	Aseptic Meningitis	Encephalitis		Gonorrhea		Hepatitis (Viral), by type				Legionellosis	Lyme Disease
			Primary	Post-infectious			A	B	NA,NB	Unspecified		
			Cum. 1992	Cum. 1992	Cum. 1992	Cum. 1991	Cum. 1992	Cum. 1992	Cum. 1992	Cum. 1992		
UNITED STATES	10,177	859	95	17	98,100	119,676	3,184	2,683	687	96	260	618
NEW ENGLAND	385	80	6	-	2,277	3,533	128	140	16	14	18	51
Maine	13	6	-	-	25	19	17	8	1	-	2	-
N.H.	12	3	-	-	-	60	10	11	3	-	3	4
Vt.	-	3	1	-	3	14	1	1	1	-	1	1
Mass.	247	25	5	-	848	1,359	60	95	8	14	8	12
R.I.	14	43	-	-	183	231	30	12	3	-	4	23
Conn.	99	-	-	-	1,218	1,850	10	13	-	-	-	11
MID. ATLANTIC	2,395	115	6	3	7,439	15,407	307	420	100	5	83	466
Upstate N.Y.	395	41	-	-	540	2,427	93	79	62	1	37	294
N.Y. City	1,216	13	-	-	2,983	5,760	62	29	1	-	-	-
N.J.	515	4	-	-	673	2,503	50	125	27	-	16	69
Pa.	269	57	6	3	3,263	4,717	102	187	10	4	30	113
E.N. CENTRAL	913	124	27	2	17,303	21,449	376	356	41	4	54	21
Ohio	214	42	14	-	5,724	5,456	106	68	32	-	34	18
Ind.	117	12	-	-	1,925	2,462	118	92	-	2	5	3
Ill.	399	12	2	-	6,579	6,477	32	6	1	-	1	-
Mich.	134	58	10	2	2,397	5,566	32	132	2	2	14	-
Wis.	49	-	1	-	578	1,488	88	58	6	-	-	-
W.N. CENTRAL	331	56	3	3	5,270	6,127	372	167	63	2	10	7
Minn.	35	3	1	-	651	659	107	7	2	-	-	-
Iowa	19	15	-	2	406	437	8	9	-	2	2	6
Mo.	187	14	-	-	3,078	3,807	84	133	60	2	1	-
N. Dak.	-	1	-	-	-	14	12	1	-	-	-	-
S. Dak.	2	2	-	1	47	97	99	-	-	-	-	-
Nebr.	14	5	-	-	3	404	28	9	-	-	7	1
Kans.	74	16	2	-	1,085	709	34	8	1	-	-	-
S. ATLANTIC	2,219	195	22	6	35,827	35,674	219	489	58	9	40	31
Del.	27	7	3	-	324	495	3	39	-	-	3	11
Md.	275	34	6	-	3,485	3,566	51	84	8	3	6	5
D.C.	150	3	-	-	1,799	2,424	4	27	-	-	6	-
Va.	114	44	3	2	4,174	3,279	21	39	6	4	2	11
W. Va.	18	-	1	-	197	272	2	17	-	1	-	-
N.C.	133	31	8	-	4,876	6,852	18	86	25	-	8	1
S.C.	118	5	-	-	2,510	2,697	9	11	-	-	12	-
Ga.	288	18	-	-	12,758	9,178	23	66	5	-	-	-
Fla.	1,096	53	1	4	5,723	6,911	88	120	14	1	3	2
E.S. CENTRAL	300	60	4	-	9,798	10,490	55	230	247	-	13	12
Ky.	36	34	3	-	881	1,172	18	23	-	7	6	-
Tenn.	87	10	-	-	2,738	4,088	23	180	243	-	5	6
Ala.	126	12	-	-	3,159	2,495	5	27	4	1	-	-
Miss.	51	4	1	-	2,520	2,735	9	-	-	-	-	-
W.S. CENTRAL	852	16	3	1	10,567	13,059	120	114	10	3	2	5
Ark.	43	7	1	-	1,921	1,625	19	17	1	-	-	1
La.	180	2	-	-	1,566	2,829	21	25	-	1	-	-
Okla.	43	-	1	1	1,088	1,359	47	52	9	1	2	4
Tex.	586	7	1	-	5,992	7,246	33	20	-	1	-	-
MOUNTAIN	246	21	4	-	1,963	2,507	447	127	24	17	16	-
Mont.	2	-	1	-	17	17	23	12	-	-	2	-
Idaho	6	-	-	-	27	28	14	18	1	-	1	-
Wyo.	1	-	-	-	8	26	-	2	4	-	1	-
Colo.	105	7	1	-	578	685	126	27	10	11	1	-
N. Mex.	17	5	2	-	203	231	38	21	-	2	1	-
Ariz.	43	7	-	-	700	963	196	16	6	1	6	-
Utah	24	-	-	-	42	88	28	1	2	3	-	-
Nev.	48	2	-	-	388	469	22	30	1	-	4	-
PACIFIC	2,536	192	20	2	9,156	11,430	1,160	640	128	42	24	25
Wash.	106	-	-	-	801	1,000	106	50	18	-	3	-
Oreg.	71	-	-	-	347	412	80	57	17	1	-	-
Calif.	2,314	161	17	1	7,746	9,680	941	530	93	40	20	25
Alaska	6	2	3	-	171	163	3	2	-	1	-	-
Hawaii	39	29	-	1	91	175	30	1	-	1	-	-
Guam	-	-	-	-	16	-	1	-	-	2	-	1
P.R.	108	31	-	-	15	105	4	50	1	1	1	-
V.I.	2	-	-	-	20	136	5	2	-	-	-	-
Amer. Samoa	-	-	-	-	5	-	-	-	-	-	-	-
C.N.M.I.	-	-	-	-	20	2	-	-	-	-	-	-

N: Not notifiable

U: Unavailable

C.N.M.I.: Commonwealth of the Northern Mariana Islands

TABLE II. (Cont'd.) Cases of selected notifiable diseases, United States, weeks ending March 14, 1992, and March 16, 1991 (11th Week)

Reporting Area	Malaria	Measles (Rubeola)					Menin-	Mumps	Pertussis			Rubella						
		Indigenous		Imported*		Total			1992		Cum.	1992	Cum.	1991	1992	Cum.	1992	Cum.
		Cum.	1992	1992	1992	Cum.	1991	Cum.	1992	1992	1992	Cum.	1992	1992	Cum.	1992	Cum.	1991
UNITED STATES	129	20	193	2	24	1,437	528	51	545	20	218	452	2	34	175			
NEW ENGLAND	2	1	2	2	5	5	33	-	-	4	19	31	-	4	1			
Maine	-	-	-	-	-	-	3	-	-	1	-	1	-	-	-			
N.H.	-	-	-	-	-	-	1	-	-	4	8	11	-	1				1
Vt.	-	-	-	-	-	-	2	1	-	-	-	-	1	-	-			
Mass.	2	1	2	2†	3	3	17	-	-	-	10	18	-	-	-			
R.I.	-	-	-	-	-	-	-	-	-	-	-	-	4	-	-			
Conn.	-	-	-	-	-	2	3	11	-	-	-	-	1	-	-			
MID. ATLANTIC	37	6	56	-	3	770	49	2	38	2	31	52	-	2	106			
Upstate N.Y.	5	-	-	1	23	23	2	18	2	15	26	-	1	100				
N.Y. City	19	2	22	-	1	80	2	-	4	-	7	-	-	-	-			
N.J.	10	4	33	-	1	327	12	-	7	-	8	3	-	1				
Pa.	3	-	1	-	-	340	12	-	9	-	8	23	-	-	6			
E.N. CENTRAL	6	-	2	-	2	45	80	2	63	3	18	95	-	5	5			
Ohio	1	-	2	-	1	1	17	1	22	1	5	24	-	-	-			
Ind.	1	-	-	-	-	-	3	-	3	2	7	17	-	1				
Ill.	1	-	-	-	-	23	36	-	20	-	2	25	-	5	2			
Mich.	2	-	-	-	-	18	20	1	16	-	1	17	-	-	2			
Wis.	1	-	-	-	-	1	3	4	-	2	3	12	-	-	-			
W.N. CENTRAL	8	1	5	-	-	3	27	1	15	2	19	40	-	1	3			
Minn.	3	-	3	-	-	2	5	-	1	-	2	16	-	2	2			
Iowa	2	-	-	-	-	-	3	-	3	-	1	4	-	-	-			
Mo.	2	-	1	-	-	-	7	1	9	2	11	14	-	1				
N. Dak.	-	-	-	-	-	-	-	-	-	-	2	1	-	-	-			
S. Dak.	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-			
Nebr.	-	-	-	-	-	-	3	-	1	-	2	4	-	-	-			
Kans.	1	1	1	-	-	1	9	-	1	-	-	-	-	1	-			
S. ATLANTIC	26	-	32	-	3	62	104	38	288	4	31	29	-	3	-			
Del.	1	-	-	-	-	6	2	-	-	-	-	-	-	-	-			
Md.	10	-	1	-	2	15	9	-	28	-	11	5	-	-	-			
D.C.	2	-	-	-	-	-	-	-	2	-	-	-	-	1	-			
Va.	4	-	4	-	1	1	19	1	18	-	2	3	-	-	-			
W. Va.	-	-	-	-	-	-	6	-	10	-	-	6	-	-	-			
N.C.	4	-	3	-	-	-	22	2	47	-	6	7	-	-	-			
S.C.	-	-	-	-	-	12	10	-	38	-	6	-	-	-	-			
Ga.	-	-	-	-	-	-	13	18	18	2	2	5	-	-	-			
Fla.	5	-	24	-	-	28	23	17	127	2	4	3	-	2	-			
E.S. CENTRAL	4	10	65	-	1	-	46	5	18	-	2	13	2	2	-			
Ky.	-	10	65	-	-	-	23	-	-	-	-	7	2	2	-			
Tenn.	1	-	-	-	1	-	11	5	12	-	-	2	6	-	-			
Ala.	3	-	-	-	-	-	12	-	4	-	-	-	-	-	-			
Miss.	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-			
W.S. CENTRAL	2	-	-	-	-	5	17	-	34	-	8	12	-	-	1			
Ark.	-	-	-	-	-	5	7	-	4	-	3	-	-	-	1			
La.	-	-	-	-	-	-	3	-	5	-	-	7	-	-	1			
Okla.	2	-	-	-	-	-	6	-	1	-	5	5	-	-	-			
Tex.	-	-	-	-	-	-	1	-	24	-	-	-	-	-	-			
MOUNTAIN	7	-	1	-	-	107	25	-	23	1	26	74	-	-	1			
Mont.	-	-	-	-	-	-	3	-	-	-	-	-	-	-	-			
Idaho	-	-	-	-	-	1	5	-	1	-	4	14	-	-	-			
Wyo.	-	-	1	-	-	-	2	-	-	-	-	3	-	-	-			
Colo.	4	-	-	-	-	1	5	-	3	-	10	27	-	-	-			
N. Mex.	2	-	-	-	-	72	2	-	N	-	8	12	-	-	-			
Ariz.	1	-	-	-	-	26	3	-	13	-	8	-	-	-	-			
Utah	-	-	-	-	-	-	-	-	3	1	4	10	-	-	-			
Nev.	-	-	-	-	-	7	5	-	3	-	-	-	-	-	1			
PACIFIC	37	2	30	-	10	440	147	3	66	4	64	106	-	17	58			
Wash.	3	-	-	7	-	23	4	2	9	13	-	-	-	-	-			
Oreg.	2	-	1	-	-	4	27	N	N	-	5	16	-	1	-			
Calif.	29	2	21	-	2	435	90	3	60	2	46	53	-	14	57			
Alaska	-	-	8	-	1	-	3	-	-	-	-	5	-	-	2	1		
Hawaii	3	-	-	-	-	1	4	-	2	-	4	19	-	2	-	-	-	
Guam	-	U	-	U	3	-	U	1	U	-	-	U	-	-	-	-	-	
P.R.	-	5	5	-	1	2	-	-	-	2	6	-	-	-	-	-	-	
V.I.	-	-	-	-	1	-	1	8	-	U	23	-	U	-	-	-	-	
Amer. Samoa	-	U	-	U	-	-	U	-	U	-	U	-	-	-	-	-	-	
C.N.M.I.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

*For measles only, imported cases includes both out-of-state and international importations.

N: Not notifiable

U: Unavailable

†International

§Out-of-state

TABLE II. (Cont'd.) Cases of selected notifiable diseases, United States, weeks ending March 14, 1992, and March 16, 1991 (11th Week)

Reporting Area	Syphilis (Primary & Secondary)		Toxic- shock Syndrome	Tuberculosis		Tula- remia	Typhoid Fever	Typhus Fever (Tick-borne) (RMSF)	Rabies, Animal
	Cum. 1992	Cum. 1991		Cum. 1992	Cum. 1991				
UNITED STATES	7,280	8,725	58	3,325	3,677	15	53	22	1,297
NEW ENGLAND	137	229	4	52	103	-	8	1	133
Maine	-	-	-	16	16	-	-	-	-
N.H.	-	2	3	-	-	-	-	-	-
Vt.	-	1	-	-	-	-	-	-	-
Mass.	60	116	1	25	38	-	6	1	-
R.I.	10	11	-	-	16	-	-	-	-
Conn.	67	99	-	11	33	-	2	-	133
MID. ATLANTIC	1,009	1,547	8	645	912	-	17	-	382
Upstate N.Y.	56	103	3	-	53	-	3	-	273
N.Y. City	595	733	-	454	612	-	4	-	-
N.J.	54	250	-	43	162	-	9	-	70
Pa.	304	461	5	148	85	-	1	-	39
E.N. CENTRAL	910	870	16	330	465	-	2	3	21
Ohio	131	122	6	67	73	-	1	3	1
Ind.	57	22	2	30	17	-	-	-	-
Ill.	484	388	1	186	262	-	-	-	4
Mich.	117	224	7	33	74	-	1	-	1
Wis.	121	114	-	14	29	-	-	-	15
W.N. CENTRAL	276	162	7	71	93	2	-	1	271
Minn.	21	17	2	19	11	-	-	-	94
Iowa	6	18	3	6	21	-	-	-	33
Mo.	202	89	-	31	28	2	-	1	2
N. Dak.	-	-	1	-	3	-	-	-	14
S. Dak.	-	1	-	7	10	-	-	-	15
Nebr.	1	1	1	1	3	-	-	-	2
Kans.	46	36	-	7	17	-	-	-	111
S. ATLANTIC	2,141	2,772	6	680	559	3	5	12	295
Del.	46	30	1	5	7	-	-	-	51
Md.	166	248	1	54	51	2	1	-	107
D.C.	109	148	-	30	35	-	1	-	5
Va.	134	234	-	83	54	1	1	-	38
W. Va.	5	4	-	15	19	-	1	-	9
N.C.	518	400	2	87	78	-	-	10	1
S.C.	270	354	1	68	69	-	-	-	24
Ga.	468	674	-	152	111	-	-	-	55
Fla.	425	680	1	186	135	-	1	2	5
E.S. CENTRAL	1,033	915	-	187	287	5	-	-	20
Ky.	25	17	-	70	65	2	-	-	12
Tenn.	206	385	-	4	75	3	-	-	-
Ala.	507	277	-	80	91	-	-	-	8
Miss.	295	236	-	33	56	-	-	-	-
W.S. CENTRAL	1,315	1,414	-	269	300	5	-	3	59
Ark.	206	69	-	20	36	2	-	2	7
La.	529	502	-	8	20	-	-	-	-
Okla.	60	34	-	25	15	3	-	1	52
Tex.	520	809	-	216	229	-	-	-	-
MOUNTAIN	108	118	4	94	89	-	-	1	20
Mont.	2	1	-	-	-	-	-	-	1
Idaho	1	3	-	7	1	-	-	-	-
Wyo.	-	1	-	-	1	-	-	-	10
Colo.	16	20	2	5	6	-	-	-	-
N. Mex.	11	6	-	14	5	-	-	-	-
Ariz.	43	84	1	44	54	-	-	-	9
Utah	1	3	1	6	13	-	-	1	-
Nev.	34	-	-	18	9	-	-	-	-
PACIFIC	351	698	13	997	879	-	21	1	96
Wash.	20	38	-	47	47	-	2	-	-
Oreg.	13	24	-	20	13	-	-	-	-
Calif.	305	634	13	902	755	-	18	1	88
Alaska	-	2	-	10	19	-	-	-	8
Hawaii	13	-	-	18	45	-	1	-	-
Guam	1	-	-	10	-	-	-	-	-
P.R.	35	75	-	24	38	-	-	-	10
V.I.	11	24	-	1	1	-	-	-	-
Amer. Samoa	-	-	-	-	-	-	-	-	-
C.N.M.I.	2	-	-	5	4	-	-	-	-

U: Unavailable

**TABLE III. Deaths in 121 U.S. cities,* week ending
March 14, 1992 (11th Week)**

Reporting Area	All Causes, By Age (Years)					P&I [†]	Reporting Area	All Causes, By Age (Years)					P&I [†]		
	All Ages	>65	45-64	25-44	1-24			All Ages	>65	45-64	25-44	1-24			
NEW ENGLAND	651	454	109	56	11	20	47	S. ATLANTIC	1,181	766	236	110	37	30	65
Boston, Mass.	188	112	33	29	4	9	18	Atlanta, Ga.	158	95	36	17	3	7	8
Bridgeport, Conn.	34	25	6	3	-	-	4	Baltimore, Md.	263	163	51	32	11	6	12
Cambridge, Mass.	20	14	3	3	-	-	1	Charlotte, N.C.	89	52	21	8	6	2	2
Fall River, Mass.	26	22	3	1	-	-	1	Jacksonville, Fla.	127	86	23	9	3	5	13
Hartford, Conn.	53	40	7	4	1	1	1	Miami, Fla.	120	73	27	16	2	2	-
Lowell, Mass.	36	29	4	3	-	-	1	Norfolk, Va.	73	48	11	7	3	4	6
Lynn, Mass.	10	8	2	-	-	-	1	Richmond, Va.	67	50	11	4	2	-	4
New Bedford, Mass.	25	19	4	1	-	-	1	Savannah, Ga.	42	30	9	2	1	-	3
New Haven, Conn.	56	40	8	2	3	3	3	S. PETERSBURG, Fla.	61	48	8	3	1	1	2
Providence, R.I.	52	38	11	2	1	-	4	Tampa, Fla.	144	98	29	10	5	2	15
Somerville, Mass.	10	8	1	1	-	-	1	Washington, D.C.	U	U	U	U	U	U	U
Springfield, Mass.	35	20	10	1	2	2	2	Wilmington, Del.	37	23	10	2	-	1	-
Waterbury, Conn.	37	29	4	2	-	-	2								
Worcester, Mass.	69	50	13	4	-	-	2								
MID. ATLANTIC	3,373	2,181	667	353	97	74	188	E.S. CENTRAL	727	489	156	42	19	21	53
Albany, N.Y.	59	43	10	4	-	-	2	Birmingham, Ala.	116	75	20	10	7	4	5
Allentown, Pa.	25	19	3	3	-	-	2	Chattanooga, Tenn.	68	49	8	6	2	3	6
Buffalo, N.Y.	100	73	15	6	3	3	3	Covington, Tenn.	78	55	18	1	-	4	3
Camden, N.J.	33	22	4	2	2	3	3	Louisville, Ky.	56	32	18	5	1	-	7
Elizabeth, N.J.	29	23	5	1	-	-	1	Memphis, Tenn.	161	102	44	11	2	2	15
Erie, Pa. [§]	41	31	10	-	-	-	2	Mobile, Ala.	83	51	21	5	2	4	9
Jersey City, N.J.	51	30	10	5	3	2	2	Montgomery, Ala.	62	53	4	1	3	1	3
New York City, N.Y.	1,979	1,212	423	235	64	45	86	Nashville, Tenn.	103	72	23	3	2	3	5
Newark, N.J.	77	36	18	3	2	-	1	W.S. CENTRAL	1,340	779	292	157	67	43	85
Paterson, N.J.	31	21	4	3	-	-	3	Austin, Tex.	87	52	20	7	6	2	6
Philadelphia, Pa.	493	332	99	46	11	5	37	Baton Rouge, La.	44	33	6	5	-	2	-
Pittsburgh, Pa. [§]	74	51	11	5	4	3	10	Corpus Christi, Tex.	U	U	U	U	U	U	U
Reading, Pa.	54	38	12	3	1	-	1	Dallas, Tex.	185	102	42	22	9	10	4
Rochester, N.Y.	113	91	13	6	2	1	6	El Paso, Tex.	67	35	14	11	5	2	7
Schenectady, N.Y.	24	20	-	3	-	-	1	Ft. Worth, Tex.	84	48	15	10	7	4	5
Scranton, Pa. [§]	35	27	7	1	-	-	1	Houston, Tex.	374	186	92	57	13	25	25
Syracuse, N.Y.	89	69	13	2	2	3	3	Little Rock, Ark.	68	41	15	6	4	2	5
Trenton, N.J.	32	20	4	6	1	-	1	New Orleans, La.	109	65	25	10	5	2	-
Utica, N.Y.	15	11	1	3	-	-	1	San Antonio, Tex.	194	123	41	21	6	3	18
Yonkers, N.Y.	19	12	5	1	1	-	6	Shreveport, La.	46	36	5	2	2	1	5
E.N. CENTRAL	2,257	1,417	460	207	116	57	130	Tulsa, Okla.	82	58	17	6	-	1	8
Akron, Ohio	58	42	10	2	2	-	2	MOUNTAIN	866	593	152	85	15	21	69
Canton, Ohio	31	18	11	1	-	1	6	Albuquerque, N.M.	104	75	14	14	1	-	-
Chicago, Ill.	515	211	124	99	73	8	19	Colo. Springs, Colo.	56	40	9	5	1	1	13
Cincinnati, Ohio	141	101	26	7	6	1	20	Denver, Colo.	108	65	21	10	5	7	9
Cleveland, Ohio	135	94	31	3	2	-	5	Las Vegas, Nev.	128	88	30	10	-	9	-
Columbus, Ohio	172	103	32	17	12	8	7	Ogden, Utah	17	12	2	3	-	3	-
Dayton, Ohio	108	83	17	5	1	-	2	Phoenix, Ariz.	175	106	33	25	3	8	16
Detroit, Mich.	242	143	52	31	8	8	6	Pueblo, Colo.	40	26	7	6	-	1	2
Evansville, Ind.	58	42	13	2	-	-	1	Salt Lake City, Utah	89	65	14	6	2	2	12
Fort Wayne, Ind.	61	43	10	5	1	2	1	Tucson, Ariz.	149	116	22	6	3	2	5
Gary, Ind.	19	11	2	4	1	1	1	PACIFIC	1,431	981	222	143	41	43	111
Grand Rapids, Mich.	81	52	21	2	1	5	7	Berkeley, Calif.	29	21	4	3	-	1	2
Indianapolis, Ind.	157	109	28	9	4	7	10	San Francisco, Calif.	100	68	9	15	4	4	4
Madison, Wis.	29	25	1	2	1	-	1	Glendale, Calif.	U	U	U	U	U	U	U
Milwaukee, Wis.	148	113	24	6	1	4	6	Honolulu, Hawaii	86	66	13	5	2	-	11
Peoria, Ill.	42	30	7	4	1	-	1	Long Beach, Calif.	94	61	16	8	3	6	14
Rockford, Ill.	45	38	5	2	-	-	3	Los Angeles, Calif.	U	U	U	U	U	U	U
South Bend, Ind.	40	32	7	-	1	-	1	Pasadena, Calif.	29	23	1	3	1	1	6
Toledo, Ohio	112	74	32	5	-	1	1	Portland, Oreg.	141	108	19	8	2	4	12
Youngstown, Ohio	63	53	7	1	1	-	2	Sacramento, Calif.	164	103	33	20	4	4	15
W.N. CENTRAL	843	616	132	53	18	24	41	San Diego, Calif.	162	119	19	15	6	3	18
Des Moines, Iowa	60	47	7	2	1	3	3	San Francisco, Calif.	158	82	35	29	7	4	6
Duluth, Minn.	30	26	4	-	-	-	3	San Jose, Calif.	149	107	23	10	2	7	7
Kansas City, Kans.	39	24	7	4	2	2	2	Santa Cruz, Calif.	20	15	3	1	-	5	-
Kansas City, Mo.	126	93	22	10	-	1	1	Seattle, Wash.	159	108	23	17	5	6	2
Lincoln, Nebr.	43	32	6	3	1	1	2	Spokane, Wash.	53	44	6	1	1	1	3
Minneapolis, Minn.	217	151	39	19	5	3	16	Tacoma, Wash.	87	56	18	8	3	2	6
Omaha, Nebr.	76	61	11	-	1	3	3	TOTAL	12,666 [§]	8,276	2,426	1,206	421	333	789
St. Louis, Mo.	122	84	17	9	4	8									
St. Paul, Minn.	64	52	8	2	1	1	3								
Wichita, Kans.	66	46	11	4	3	2	1								

*Mortality data in this table are voluntarily reported from 121 cities in the United States, most of which have populations of 100,000 or more. A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are not included.

[†]Pneumonia and influenza.

[§]Because of changes in reporting methods in these 3 Pennsylvania cities, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.

**Total includes unknown ages.

U: Unavailable

Alcohol-Related Traffic Fatalities — Continued

Compared with 1982, the total number of fatalities in 1990 was 13% higher among females and 3% lower among males (Table 1). The increase in fatalities among females was not accounted for by alcohol-related fatal crashes; from 1982 to 1990, the estimated number of ARTFs decreased 10% among females and 13% among males. Nonalcohol-related traffic fatalities increased 33% among females and 12% among males (Table 1). Preliminary data from NHTSA indicate that total fatalities decreased to 41,150 in 1991; fatalities among males decreased to 28,225 (an 11% decrease over 1982), while fatalities among females decreased to 12,925 (a 7% increase over 1982).

From 1982 to 1990, the number of female drivers involved in fatal crashes increased 28%, while the number of male drivers involved in fatal crashes remained essentially unchanged (Table 2). Decreases in the estimated numbers of alcohol-involved drivers in fatal crashes were greater for males (15%) than for females (4%). However, the increase in the estimated number of nonalcohol-involved female drivers (39%) was greater than the increase in nonalcohol-involved male drivers (10%).

Nationwide, the number of female licensed drivers increased 12% from 1982 to 1989 (the most recent year for which license data are available), compared with a 7% increase among males. Involvement rates for female drivers in fatal crashes per 100,000 licensed drivers were lower in 1982 and in 1989 than those of male drivers (Table 3). However, the total involvement rate in fatal crashes for male drivers decreased 6%, but increased 17% for female drivers. From 1982 to 1989, the estimated alcohol-involvement rate decreased 8% for female drivers and 21% for male drivers. The estimated rate for intoxicated drivers involved in fatal crashes also decreased more slowly for females than for males (11% versus 21%). However, from 1982 to 1989, the estimated driver-involvement rate in crashes where alcohol was not a contributing factor increased 27% for females and 5% for males.

Reported by: ME Vegega, PhD, Office of Alcohol and State Programs, Traffic Safety Programs; TM Klein, National Center for Statistics and Analysis, Research and Development, National

TABLE 1. Estimated number and percentage of total traffic fatalities in crashes involving at least one person* with a blood alcohol concentration (BAC), by sex[†] and BAC[‡] level — United States, 1982–1990

Year	Total	Females				Males				
		BAC = 0.00		BAC ≥ 0.01		BAC = 0.00		BAC ≥ 0.01		
		No.	(%)	No.	(%)	Total	No.	(%)	No.	(%)
1982	12,062	6,534	(54.2)	5,528	(45.8)	31,879	12,244	(38.4)	19,635	(61.6)
1983	12,084	6,808	(56.3)	5,276	(43.7)	30,499	12,132	(39.8)	18,367	(60.2)
1984	12,709	7,395	(58.2)	5,314	(41.8)	31,541	13,100	(41.5)	18,441	(58.5)
1985	12,856	7,743	(60.2)	5,113	(39.8)	30,959	13,365	(43.2)	17,594	(56.8)
1986	13,191	7,972	(60.4)	5,219	(39.6)	32,856	14,045	(42.7)	18,811	(57.3)
1987	13,757	8,325	(60.5)	5,432	(39.5)	32,621	14,420	(44.2)	18,201	(55.8)
1988	14,123	8,734	(61.8)	5,389	(38.2)	32,947	14,715	(44.7)	18,232	(55.3)
1989	14,232	9,079	(63.8)	5,153	(36.2)	31,338	14,094	(45.0)	17,244	(55.0)
1990	13,635	8,683	(63.7)	4,952	(36.3)	30,866	13,747	(44.5)	17,119	(55.5)

*Driver or nonoccupant.

[†]Reported only for persons for whom sex is known; numbers do not add to annual totals because of missing data.

[‡]BAC distributions are estimates for drivers and nonoccupants involved in fatal crashes. Numbers of fatalities are rounded to the nearest whole number.

Source: Fatal Accident Reporting System, National Highway Traffic Safety Administration.

Alcohol-Related Traffic Fatalities — Continued

Highway Traffic Safety Administration, Unintentional Injuries Section, Epidemiology Br, Div of Injury Control, National Center for Environmental Health and Injury Control, CDC.

Editorial Note: Drinking and driving has traditionally been considered a problem predominately among males, and males still account for a greater proportion of both ARTFs and alcohol-involved drivers in fatal crashes. However, the increasing number of females involved in fatal crashes underscores the need to better characterize this problem.

Data from North Carolina indicate that, from 1975 through 1984, males showed a substantial decrease in crash rates, while females demonstrated almost no change (2), and females aged <35 years exhibited greater increases in crash rates than their male counterparts (3). Studies also indicate that arrest rates for driving while intoxicated have increased among women (2,4) as have single-vehicle nighttime crashes (a surrogate measure for alcohol-related crashes) (2).

TABLE 2. Estimated number and percentage of drivers involved in fatal crashes, by sex* and driver† blood alcohol concentration (BAC)[§] level — United States, 1982–1990

Year	Total	Females				Males				
		BAC = 0.00	BAC ≥ 0.01	Total	No.	(%)	BAC = 0.00	BAC ≥ 0.01	Total	
1982	10,675	7,937	(74.3)	2,738	(25.7)	44,370	25,839	(58.2)	18,531	(41.8)
1983	10,958	8,245	(75.2)	2,713	(24.8)	42,812	25,474	(59.5)	17,338	(40.5)
1984	11,907	9,097	(76.4)	2,810	(23.6)	44,723	27,387	(61.2)	17,336	(38.8)
1985	12,142	9,497	(78.2)	2,645	(21.8)	44,846	28,404	(63.3)	16,442	(36.7)
1986	12,744	10,075	(79.1)	2,669	(20.9)	46,653	29,133	(62.4)	17,519	(37.6)
1987	13,614	10,758	(79.0)	2,856	(21.0)	46,884	29,824	(63.6)	17,060	(36.4)
1988	13,951	11,117	(79.7)	2,834	(20.3)	47,402	30,234	(63.8)	17,168	(36.2)
1989	14,054	11,272	(80.2)	2,782	(19.8)	45,448	29,530	(65.0)	15,919	(35.0)
1990	13,693	11,058	(80.8)	2,635	(19.2)	44,198	28,366	(64.2)	15,832	(35.8)

*Reported only for drivers for whom sex is known; numbers do not add to annual totals because of missing data.

†Driver may or may not have been killed.

[§]BAC distributions are estimates for drivers involved in fatal crashes. Numbers of drivers are rounded to the nearest whole number.

Source: Fatal Accident Reporting System, National Highway Traffic Safety Administration.

TABLE 3. Estimated rate* of drivers† involved in fatal crashes, by sex[§] and blood alcohol concentration (BAC) — United States, 1982 and 1989

Category	1982		1989	
	Female	Male	Female	Male
No alcohol (BAC = 0.00 g/dL)	11.1	32.9	14.1	34.6
Alcohol-involved (BAC ≥ 0.01 g/dL)	3.8	23.6	3.5	18.6
Intoxicated (BAC ≥ 0.10 g/dL)	2.8	18.3	2.5	14.4
Total	14.9	56.5	17.5	53.2

*Per 100,000 licensed drivers.

†Driver may or may not have been killed.

[§]Drivers for whom sex is known.

Source: Fatal Accident Reporting System, National Highway Traffic Safety Administration; and Driver Licensing Data, Federal Highway Administration.

Alcohol-Related Traffic Fatalities — Continued

The findings in this report suggest the alcohol-involvement rate for female drivers is not declining as quickly as it is for male drivers. However, the data presented here do not suggest an increase in drinking and driving among women. Differences in methodologies (e.g., variables investigated) and time periods studied may account for the discrepancy with other studies. In addition, because this analysis did not disaggregate age data for each sex, possible increases in alcohol-involvement among young females could not be detected.

Possible explanations for the findings reported here include changing roles for women, increased social acceptability of women as both drinkers and drivers, and increased exposure for women during times of high risk (e.g., nighttime and weekends). In addition, because males have been overwhelmingly involved in traffic fatalities and ARTFs, prevention and intervention programs typically have been targeted toward males. The findings reported here emphasize the need to determine the reasons for both the increase in traffic fatalities among females and the increased involvement of females as drivers in fatal crashes and target programs to females accordingly. In addition, information may need to be targeted toward women about the effects of alcohol on performance and the differences between women and men in alcohol metabolism and intoxication levels reached at specific doses of alcohol (6).

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Notice to Readers

**Publication of NIOSH Alert:
Request for Assistance in Preventing Lead Poisoning
in Construction Workers**

CDC's National Institute for Occupational Safety and Health (NIOSH) periodically issues alerts about workplace hazards that have caused death or serious injury or illness to workers. One such alert, *Request for Assistance in Preventing Lead Poisoning in Construction Workers* (1), was recently released and is now available to the public.* This alert presents new evidence associating lead poisoning with abrasive blasting, sanding, cutting, burning, or welding of bridges and other steel structures coated with lead-containing paints.

*Single copies of this document are available without charge from the Information Dissemination Section, Division of Standards Development and Technology Transfer, NIOSH, 4676 Columbia Parkway, Cincinnati, OH 45226; telephone (513) 533-8287.

Notice to Readers - Continued

The alert describes cases of lead poisoning (defined by NIOSH as a concentration of lead in whole blood exceeding 50 µg/dL) in 42 construction workers at bridges in eight different sites. At least 26 (62%) of the 42 cases occurred among workers employed at a site using a containment structure. The actual number of cases of occupational lead poisoning nationwide is higher than 42 but cannot be accurately determined because employers are not required to routinely measure lead concentration in the blood of exposed construction workers. One of the national health objectives for the year 2000 is to eliminate occupational lead exposures that result in blood lead concentrations >25 µg/dL of whole blood (objective 10.8) (2).

For the construction industry, NIOSH and the Occupational Safety and Health Administration recommend that exposure to lead dust and fumes be minimized by using engineering controls and work practices, and that personal protective equipment (PPE)—including respirators—be used for additional protection (3). Airborne lead concentrations and blood lead concentrations should be monitored to determine the effectiveness of controls and PPE. All new contracts of federal, state, and local departments of transportation should include specifications for a mandatory program of worker protection from lead poisoning during the maintenance, repainting, or demolition of bridges and other steel structures.

References

1. NIOSH. NIOSH alert: request for assistance in preventing lead poisoning in construction workers. Cincinnati: US Department of Health and Human Services, Public Health Service, CDC, 1991; DHHS publication no. (NIOSH)91-116.
2. Public Health Service. Healthy people 2000: national health promotion and disease prevention objectives—full report, with commentary. Washington, DC: US Department of Health and Human Services, Public Health Service, 1991; DHHS publication no. (PHS)91-50212.
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Quarterly Table Reporting Alcohol Involvement in Fatal Motor-Vehicle Crashes

The following table reports alcohol involvement in fatal motor-vehicle crashes in the United States for January–March 1991. This table, published quarterly in *MMWR*, focuses attention on the impact of alcohol use on highway safety.

A fatal crash is considered alcohol-related by the National Highway Traffic Safety Administration (NHTSA) if either a driver or nonoccupant (e.g., pedestrian) had a blood alcohol concentration (BAC) of ≥ 0.01 g/dL in a traffic crash reported to police. Those with a BAC ≥ 0.10 g/dL (the legal level of intoxication in most states) are considered intoxicated. Because BAC levels are not available for all persons in fatal crashes, NHTSA estimates the number of alcohol-related traffic fatalities based on a discriminant analysis of information from all cases for which driver or nonoccupant BAC data are available. Seasonal trends may be associated with these data.

Estimated number and percentage of total traffic fatalities* and drivers involved in fatal crashes, by age and blood alcohol concentration (BAC) level — United States, January–March 1991

Age (yrs)	No. fatalities ^b	Fatalities by BAC ^c				
		BAC = 0.00		0.01% \leq BAC \leq 0.09%		BAC ≥ 0.10
		No.	(%)	No.	(%)	No.
0–14	501	370	(73.8)	33	(6.6)	98 (19.5)
15–20	1,330	707	(53.1)	192	(14.5)	431 (32.4)
21–24	926	318	(34.3)	104	(11.2)	504 (54.5)
25–34	1,844	658	(35.7)	152	(8.2)	1,034 (56.1)
35–64	2,582	1,323	(51.3)	209	(8.1)	1,049 (40.6)
≥ 65	1,432	1,122	(78.4)	100	(6.9)	210 (14.7)
Total	8,615	4,498	(52.2)	790	(9.2)	3,327 (38.6)

Age (yrs)	No. drivers ^b	Drivers' by BAC ^d				
		BAC = 0.00		0.01% \leq BAC \leq 0.09%		BAC ≥ 0.10
		No.	(%)	No.	(%)	No.
0–14 ^{e,f}	29	26	(88.7)	2	(6.3)	1 (5.0)
15–20	1,639	1,171	(71.4)	159	(9.7)	309 (18.9)
21–24	1,358	778	(57.3)	131	(9.7)	449 (33.1)
25–34	3,014	1,827	(60.6)	209	(6.9)	978 (32.4)
35–64	3,958	2,927	(74.0)	215	(5.4)	816 (20.6)
≥ 65	1,175	1,043	(88.7)	45	(3.8)	88 (7.5)
Total	11,173	7,771	(69.9)	762	(6.8)	2,640 (23.6)

*Fatalities include all occupants and nonoccupants who died within 30 days of a motor-vehicle crash on a public roadway.

^aBAC distributions are estimates for drivers and nonoccupants involved in fatal crashes. Numbers of fatalities are rounded to the nearest whole number.

^bIncludes only those for whom age is known.

^cDriver may or may not have been killed.

^dBAC distributions are estimates for drivers involved in fatal crashes. Numbers of drivers are rounded to the nearest whole number.

^eAlthough usually too young to legally drive, persons in this age group are included for completeness of the data set.

Source: Fatal Accident Reporting System, National Highway Traffic Safety Administration.

The *Morbidity and Mortality Weekly Report (MMWR)* Series is prepared by the Centers for Disease Control and is available on a paid subscription basis from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402; telephone (202) 783-3238.

The data in the weekly *MMWR* are provisional, based on weekly reports to CDC by state health departments. The reporting week concludes at close of business on Friday; compiled data on a national basis are officially released to the public on the succeeding Friday. Inquiries about the *MMWR* Series, including material to be considered for publication, should be directed to: Editor, *MMWR* Series, Mailstop C-08, Centers for Disease Control, Atlanta, GA 30333; telephone (404) 332-4555.

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